Work Order ID 53819

November 18, 2009 4:08:36 PM

- Barpad

Item ID: D4015-1 **Accept** **Setup Start**

Revision ID: **Stop**

Item Name: Wearbar

Start Date: 11/19/2009 **Start Qty:** 100.00 **Cust Item ID:**

Required Date: 11/24/2009 **Req'd Qty:** 100.00 **Customer:**

Reference:

Run Start

Approvals: **Process Plan:** MF **Date:** 09-11-19 **Tooling:** _____ **Date:** _____

Stop

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	**Revision Nbr**								
D4015	B								
100		0.00							
Waterjet		0.00							
FLOW CNC Waterjet	**Memo**								
	1-Cut as per Dwg D4015 Dwg Rev: B Prog Rev: B								
	2-Deburr if necessary M-L 09/11/23 (172X)								
110	QC2- Inspect parts off machine FAI/FAIB	0.00							
QC		0.00							
Quality Control	**Memo**								

HB 9-11-20

(172)

HB 9-11-20

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

Work Order ID 53819

November 18, 2009 4:08:36 PM

Item ID: D4015-1 **Accept** **Setup Start** **Stop**

Revision ID:

Item Name: Wearbar

Start Date: 11/19/2009 **Start Qty:** 100.00 **Cust Item ID:**

Required Date: 11/24/2009 **Req'd Qty:** 100.00 **Customer:**

Reference:

Run Start **Stop**

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC8- Inspect parts - second check	0.00				counter 472	0		
QC	**Memo**	0.00							
Quality Control									
130	Form as per dwg	0.00							
Brake NC	**Memo**	0.00							
Brake NC	***Use DT9541 forming tool***								
140	QC5- Inspect part completeness to step on W/O	0.00				counter 472	0		
QC	**Memo**	0.00							
Quality Control									

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

Work Order ID 53819

November 18, 2009 4:08:36 PM

Item ID: D4015-1 **Accept** **Setup Start**

Revision ID:

Item Name: Wearbar **Stop**

Start Date: 11/19/2009 **Start Qty:** 100.00 **Cust Item ID:**

Required Date: 11/24/2009 **Req'd Qty:** 100.00 **Customer:**

Reference:

Run Start

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Stop

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180 Packaging Packaging	Identify as per dwg & Stock Location: W/A	0.00				EL 9-11-23			(112)
	Memo EL	0.00							
190 QC Quality Control	QC21- Final Inspection - Work Order Release	0.00				09/11/24			HJ
	Memo	0.00							

MF 09-11-24

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

Picklist Print

November 18, 2009 4:08:36 PM

Work Order ID: 53819

Parent Item: D4015-1

Parent Item Name: Wearbar

Start Date: 11/19/2009 **Required Date:** 11/24/2009

Start Qty: 100.00 **Required Qty:** 100.00

Comments: IPP RevA: New issue 09.10.28 verified by:JLM
remove welding 09.11.03 DD verified by:EC
dwg 09.11.18 DD verified by:JLM
IPP Revb:
IPP RevC: revC as per

Component Item ID/	Replacement	Mfg/	Bin	Primary	Last	Route	Unit of	Qty on	Remaining	Qty	Date	Status
M304S16GA		Purchased	No			100	sf	190.6742	1.0000	4		

304/316 Sheet .063

Warehouse Location	Loc Qty	Loc Code
Main Warehouse		
MAT	190.6741737	
106860	16.018	
111924	25.1689737	
112442	29.8899	
112567	0.2973	
112885	119.3	

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	53819
Description: WEAR BAR	Part Number:	D40154
Inspection Dwg: D40154 Rev: B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

[X] First Article [] Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø .194	+.005 -.001	.195	✓			
.500	± .010	.501	✓			
.250	± .010	.252	✓			
.850	± .010	.853	✓			
1.00	± .030	1.010	✓			
1.35	± .030	1.352	✓			
.063	± .010	.060	✓			

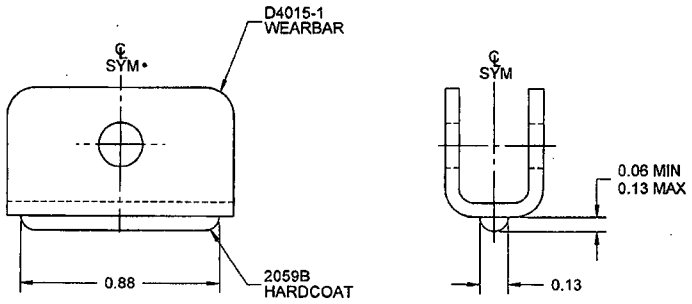
Measured by:	IB
Date:	9-11-19

Audited by:	S
Date:	09/11/23

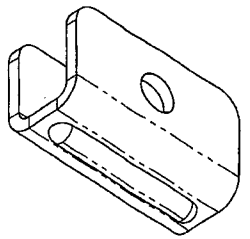
Prototype Approval:	N/A
Date:	N/A

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	

ITEM	QTY -041	P/N	DESCRIPTION
1	1	D4015-041	WEARBAR WELDMENT
11	1	D4015-1	WEARBAR
21	A/R	2059B	HARDCOAT



#53819



D4015-041 WEARBAR WELDMENT

NOTES:
1) MATERIAL: SEE SHEET 2 FOR D4015-1
2) FINISH: POWDER COAT "BLACK SANDTEX" (4.3.5.7) PER DART QSI 005 4.3 (B)
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: NONE
7) WEIGHT: 0.02 lbs
8) WELDING: PER DART QSI 004

REV.	DESCRIPTION	BY	DATE
B	CHANGED COLOR TO BLACK SANDTEX	MB	09.11.13
A	NEW ISSUE	MB	09.10.23

DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN		
CHECKED	F.J.S	DRAWING NO. REV. B D4015 SHEET 1 OF 2
MFG. APPR.		
APPROVED		TITLE SCALE WEARBAR WELDMENT NTS
DE APPR.		
DATE	09.11.13	

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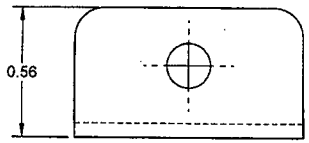
W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

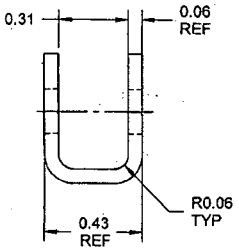
Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

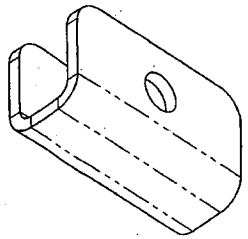
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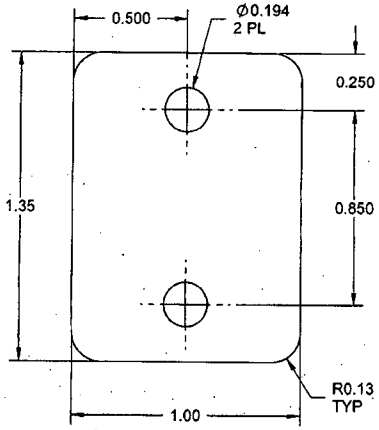
D4015-1 WEARBAR
MAKE FROM D4015-1



#53819



.403



D4015-1F WEARBAR FLAT PATTERN

NOTES:
1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET ANNEALED 2B FINISH, 16 GAUGE (0.063 THICK)
PER AMS 5513 (304) OR 5524 (316) OR ASTM A240 OR ASME SA240
REF. DART SPEC. M304S16GA
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: NONE
7) WEIGHT: 0.02 lbs

DESIGN		**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
DRAWN		
CHECKED	TJS	DRAWING NO. D4015 REV. B
MFG. APPR.		SHEET 2 OF 2
APPROVED		TITLE WEARBAR WELDMENT SCALE NTS
DE APPR.		
DATE 09.11.13		

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Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

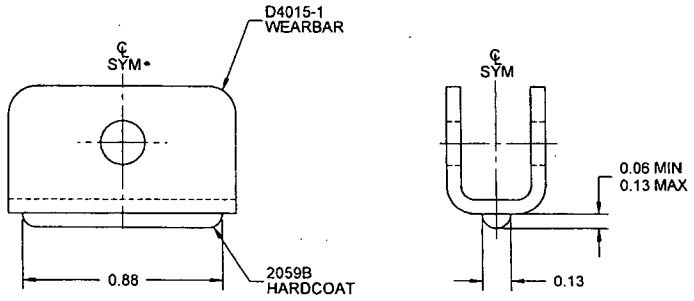
Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

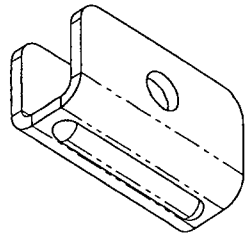
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

ITEM	QTY -041	P/N	DESCRIPTION
1	1	**D4015-041**	**WEARBAR WELDMENT**
11	1	D4015-1	WEARBAR
21	A/R	2059B	HARDCOAT



D4015-041 WEARBAR WELDMENT



5381 9

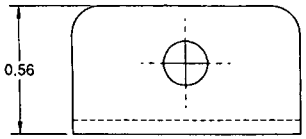
RELEASED
2009 -11- 24

NOTES:
1) MATERIAL: SEE SHEET 2 FOR D4015-1
2) FINISH: POWDER COAT "BLACK SANDTEX" (4.3.5.7) PER DART QSI 005 4.3 (B)
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: NONE
7) WEIGHT: 0.02 lbs
8) WELDING: PER DART QSI 004

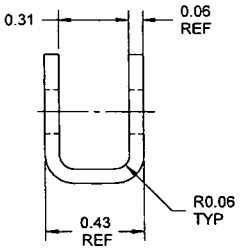
REV.	DESCRIPTION	BY	DATE
B	CHANGED COLOR TO BLACK SANDTEX	MB	09.11.13
A	NEW ISSUE	MB	09.10.23

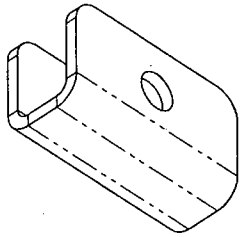
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN		
CHECKED	AJS	DRAWING NO. D4015 REV. B
MFG. APPR.		SHEET 1 OF 2
APPROVED		TITLE WEARBAR WELDMENT SCALE NTS
DE APPR.		
DATE	09.11.13	

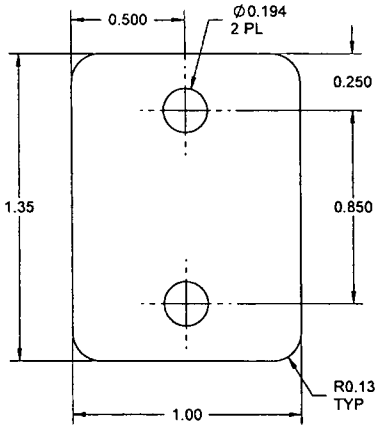
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D4015-1 WEARBAR
MAKE FROM D4015-1







D4015-1F WEARBAR FLAT PATTERN

53819

RELEASED
2009-11-24

NOTES:
1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET ANNEALED 2B FINISH, 16 GAUGE (0.063 THICK)
PER AMS 5513 (304) OR 5524 (316) OR ASTM A240 OR ASME SA240
REF. DART SPEC. M304S16GA
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: NONE
7) WEIGHT: 0.02 lbs

DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN		
CHECKED	AJS	DRAWING NO. D4015 REV. B
MFG. APPR.		SHEET 2 OF 2
APPROVED		TITLE WEARBAR WELDMENT SCALE NTS
DE APPR.		
DATE 09.11.13		

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